

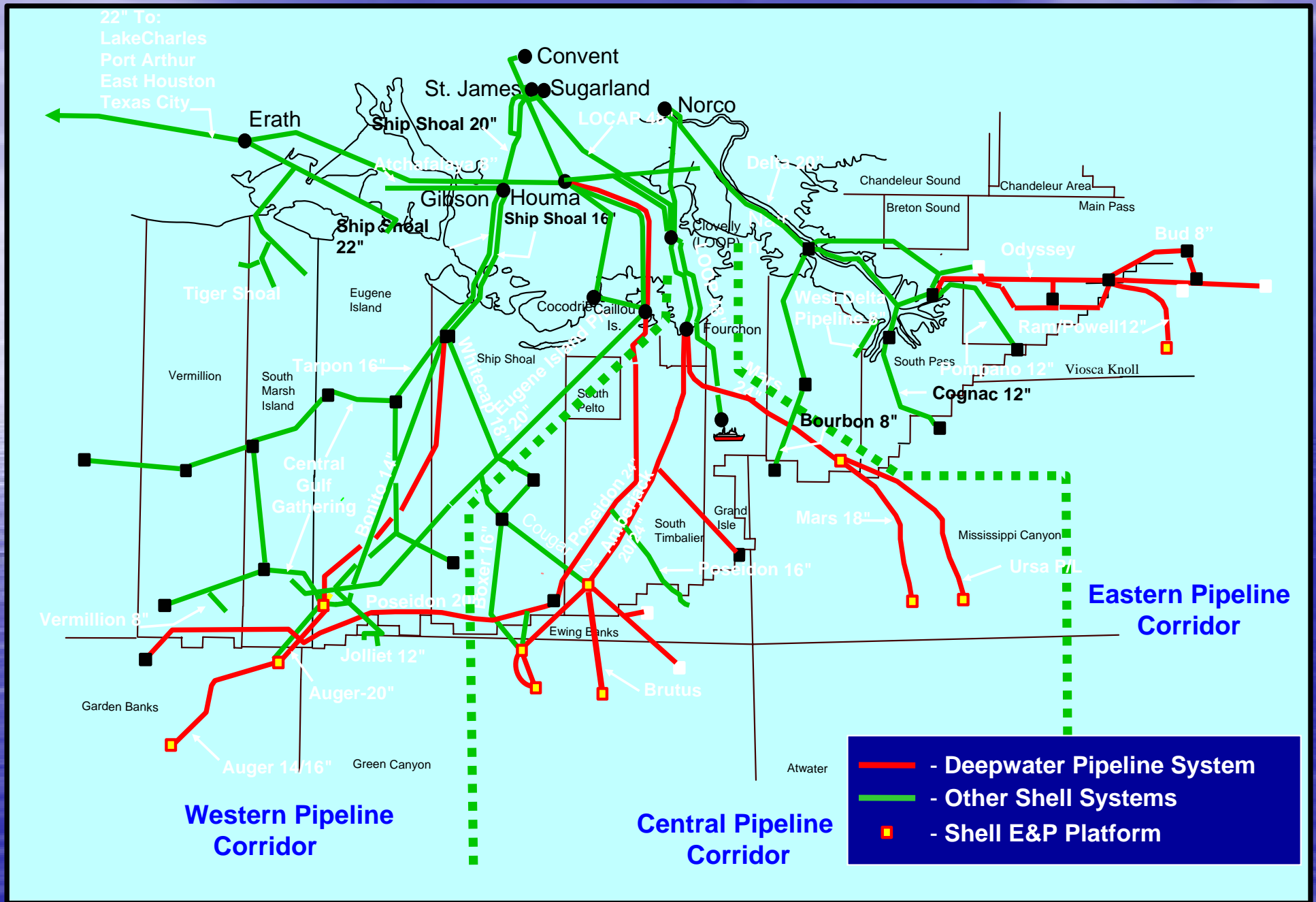
**An Integrated
Super Major's View
for the
Gulf of Mexico**

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Topics

- GOM Pipeline Network
- View Point on Tanker Shuttling
- Issues to be Better Understood
- Conclusions

Shell GOM Pipeline Network



Extensive GOM Pipeline Network

- Extensive Shell GOM pipeline network was built primarily for Shell projects
- Extensions into deepwater have been supported by Shell projects
- Already extensive pipeline network continues to grow in the deepwater
- Pipelines are not being ruled out for ultra deepwater projects

Extensive GOM Pipeline Network

- Pipeline network allows for market flexibility and reliability
- Pipeline competition in GOM has resulted in attractive transportation pricing
- Significant experience in GOM with pipelines results in high comfort level

View Point on Tanker Shuttling

- Seek the solution that makes the most economic sense across the entire value chain
- Insure that all risks are fully defined and mitigated
- Tanker shuttling is an option for ultra deepwater development and areas with limited pipeline infrastructure

View Point on Tanker Shuttling

- Market flexibility is a plus
- Once established it could aid economical development of smaller discoveries
- Tanker shuttling will occur in the GOM

Issues to be Better Understood

- Cost
 - Can Jones Act vessels be built at the estimated cost?
 - Must understand all cost elements
 - More than just capex and transportation rates
 - Need to define all costs from development through ultimate delivery to customer
 - Availability of shipyards and impact on cost

Issues to be Better Understood

- Cost
 - Limited market for Jones Act vessels – ability to optimize?
 - How will production volume risk be viewed by the tanker shuttling?

Issues to be Better Understood

- Technology
 - FPSOs versus typical GOM deepwater facilities
 - TLPs, SPARs, semi-submersibles
 - Storage for typical facilities
 - Gas transportation solution
 - Other technology hurdles for tanker shuttling?
 - What are the actual technology limitations for pipelines?

Issues to be Better Understood

- Project Schedule
 - Regulatory impact on project schedule
 - permit process
 - Can Jones Act tanker shuttles be built on time
 - Availability of shipyards

Issues to be Better Understood

- Marketing
 - How will it change the oil marketing strategy
 - Flexibility
 - Selling to multiple buyers
 - Known transportation rate schedules
 - Market flexibility appears to be a positive
 - Crude quality
 - Blending and segregating opportunities
 - Dealing with contaminants such as methanol
 - Changes in supply/demand balances on crude pricing in various markets?

Issues to be Better Understood

- Competition
 - How long will it take to develop a competitive market for shuttle tankers in the GOM?
 - How many players will surface to create competition
 - Barriers to entry seem significant

Issues to be Better Understood

- Other
 - Environmental risks
 - Partnership issues – pipeline vs. shuttle tanker
 - Weather and reliability
 - Vessels required to insure non-interruptible service

Issues to be Better Understood

- Other
 - Ability to own shuttle tankers to maintain integration along value chain
 - Investment economics
 - Public perception
 - Impact on external stakeholders

Conclusions

- Shuttle tankers will be utilized in the GOM
- Pipelines will continue to extend into the deepwater GOM
- Many significant issues need to be better understood
- Support will need to be industry-wide